(3) is one of the amino acids glutamine, asparagine, serine or threonine[.];

(4) is one of the amino acids glycine, alanine, valine, isoleucine, leucine phenylalanine, methionine, tryptophan or tyrosine[.];

(5) is one of the amino acids alanine, threonine, glutamine, asparagine or serine; and if [and only if] at least one of the a.a. at positions +1, +9, +10, +11 or +13 [has been replaced according to what is herein described,] from the native LBP sequence is replaced by any of SEQ ID Nos. 2 to 63, then (5) could also be arginine or lysine[.];

(6) is one of the amino acids tryptophan or phenylalanine[.];

(7) is one of the amino acids lysine or arginine[.];

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(8) is one of the amino acids alanine, valine, isoleucine, leucine, phenylalanine or tyrosine[.];

(9) is one of the amino acids alanine, threonine, glutamine, asparagine or serine; and if [and only if] at least one of the a.a. at positions +1, +5, +10, +11 or +13 [has been replaced according to what is herein described,] from the native LBP sequence is replaced by any of SEQ ID Nos. 2 to 63, then (9) could also be arginine or lysine[.];

(10) is one of the amino acids alanine, valine, isoleucine, leucine, phenylalanine, methionine, tryptophan or tyrosine; and if [and only if] at least one of the a.a. at positions +1, +5, +9, +11, +13 [has been replaced according to what is herein described,] from the native LBP sequence is replaced by any of SEQ ID Nos. 2 to 63, then (10) could also be lysine or arginine[.];

(11) is one of the amino acids alanine or valine; and if [and only if] at least one of the a.a. at positions +1, +5, +9, +10, +13 [has been replaced according to what is herein described,] from the native LBP sequence is replaced by any of SEQ ID Nos. 2 to 63, then (11) could also be serine; and if [and only if] the a.a. position +10 [has been replaced according to what is herein described,] from the native LBP sequence is replaced by any of

SEQ ID Nos. 2 to 63, then (11) could also be threonine, glutamine, asparagine, lysine or arginine[.];

(12) is one of the amino acids pheylalanine, tryptophan or tyrosine[.];

(13) is one of the amino acids alanine, threonine, glutamine, asparagine or serine; and if [and only if] at least one of the a.a. at positions +1, +5, +9, +10 +11 [has been replaced according to what is herein described,] from the native LBP sequence is replaced by any of SEQ ID Nos. 2 to 63, then (13) could also be pheylalanine, arginine or lysine; and if [and only if] the a.a. at position +14 is lysine or arginine, then (13) could also be glycine[.];

(14) is one of the amino acids lysine, arginine or alanie, and if and only if the a.a. at position +13 [has been replaced according to what is herein described,] from the native LBP sequence is replaced by any of SEQ ID Nos. 2 to 63, then (14) could also be valine, isoleucine, leucine, phenylalanine, methionine, tryptophan or tyrosine[.];and --

A! cmt

--2. (Amended) A peptide according to claim 1 [having the ability to bind and neutralize] wherein said peptide binds and neutralizes LPS [which is] at the N-terminal region of a larger polypeptide. --

--3. (Amended) A peptide according to claim 1 [having the ability to bind and neutralize] wherein said peptide binds and neutralizes LPS (which is] at the C-terminal region of a larger polypeptide.--

4. (Amended) A peptide according to claim 1 [having the ability to bind and neutralize] wherein said peptide binds and neutralizes LPS which is inserted into the linear chain of a larger polypeptide.--

--5. (Amended) A peptide according to claim 1 wherein at least one amino acid of said sequence [has been] is substituted by a non-natural homologous amino acid.--

--6. (Amended) A peptide according to claim 1 wherein the N-terminus [has been modify] is modified by acetylation or succinylation.--

--7. (Amended) A polypeptide according to claim 2 wherein the N-terminus [has been modify] is modified by acetylation or succinylation.--

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--8. (Amended) A peptide according to [anyone of claims] claim 1 [or 3] wherein the C-terminus is a -OH, -COOH or -$CONH_2$ group.--

--9. (Amended) A peptide according to claim 1 [that has been] wherein said peptide is constrained to adopt a cyclic conformation by an intramolecular disulfide or amide bond.--

--10. (Amended) A peptide according to claim 5 that has been constrained to adopt a cyclic conformation by an intramolecular disulfide or amide bond.--

--11. (Amended) A peptide according to claim 1 wherein the chain backbone [have been] of said peptide is substituted by backbone-mimetic organic entities.--

--12. (Amended) A peptide according to [anyone of claims 5, 6, 9 or 10] claim 5 wherein the chain backbone [have been] of said peptide is substituted by backbone-mimetic organic entities.--

--13. (Amended) A peptide according to [anyone of claims 1, 5, 6, 9 or 10] claim 1 wherein at least one amino acid of said sequences [have been] is substituted by alkylation using chemical or enzymatic methods.--

--14. (Amended) A peptide according to [anyone of claims 1, 5, 6, 9 or 10] claim 1 wherein at least one amino acid of the said [sequences have been] peptide is glycosylated using chemical or enzymatic methods.--

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--15. (Amended) A linear polypeptide chain containing two or more repeats of a peptide sequence according to [anyone of claims 1 or 5] claim 1 wherein said peptide sequence is connected by 12-25 amino acid linkers, rich in glycine, alanine, proline or serine residues.--

--16. (Amended) An arrangement of three [of] or more copies of homologous peptide sequences or combinations of different sequences, according to [anyone of claims 1 or 5,] claim 1 wherein said peptide sequences are linked by their C-terminus to a lysine core structure.--

--17. (Amended) A pharmaceutical composition comprising effective amounts of a peptide according to claim 1, and a pharmaceutically acceptable diluent, carrier or adjuvant.--

-- 18. (Amended) A pharmaceutical composition comprising effective amounts of a molecule according to [anyone of claims 2 to 4] claim 2 and a pharmaceutically acceptable diluent, carrier or adjuvant.--

--20. (Amended) A pharmaceutical composition comprising effective amounts of a molecule according to[anyone of claims 6 to 16] claim 6 and a pharmaceutically acceptable diluent, carrier or adjuvant.--

Please cancel Claims 21-28 and insert therefor new Claims 29-36 as follows:

--29. A method for treating Systemic Inflammatory Response Syndrome comprising administering a pharmaceutical composition according to claim 17 to a patient.--

--30. A method for treating Gram-negative sepsis and its sequence comprising administering a pharmaceutical composition according to claim 17 to a patient.--

--31. A method for treating obstructive jaundice comprising administering a pharmaceutical composition according to claim 17 to a patient.--

--32. A method for treating inflammatory bowel diseases comprising administering a pharmaceutical composition according to claim 17 to a patient.--

--33. A method of treating bacteremia comprising administering a pharmaceutical composition according to claim 17 to a patient.--

--34. A method of treating osteomyelitis comprising administering a pharmaceutical composition according to claim 17 to a patient.--

--35. A method of treating patients at risk of developing sepsis comprising administering a pharmaceutical composition according to claim 17 to a patient.--